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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,035	03/12/2004	Robert A. Biggs	CM06854H	6703
22917	7590	11/29/2005	EXAMINER HARPER, KEVIN C	
MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196			ART UNIT 2666	PAPER NUMBER

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/799,035

Applicant(s)

BIGGS, ROBERT A.

Examiner

Kevin C. Harper

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 2,3,13 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-12,14 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/05</u> . | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

Applicant's arguments, filed September 13, 2005 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground of rejection is made in view of Gilhousen and a new ground of rejection is made in view of Rahnema. Although claim 3 was previously indicated as allowable, the Gilhousen reference teaches a quick paging channel that indicates the location of reverse channel signaling in the assigned slot of the paging channel (col. 5, lines 26-32).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Gilhousen et al. (US 6,421,540).

1. Gilhousen discloses a method for use in a TDMA system (col. 4, lines 7-12), the method comprising at a subscriber the steps of listening to an assigned channel (fig. 2, full paging channel) and an alternate channel (fig. 2, quick paging channel; col. 5, lines 37-39), performing the step of listening to the alternate channel until a location of reverse channel signaling is determined for the assigned channel (col. 5, lines 26-32), obtaining a fixed periodic rate for reverse channel signaling (col. 5, lines 39-43), transmitting information on the assigned channel (col. 5, lines 21-22), and based on the fixed periodic rate, selectively listening the alternate channel to receive reverse channel signaling (col. 7, lines 16-19).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilhousen et al. (US 6,421,540) in view of Rahnema (US 5,465,253).

2. Regarding claims 5-8 and 10, Gilhousen discloses a method performed by a mobile terminal relating to fixed rate signaling (fig. 2). However, Gilhousen does not disclose preventing burst collisions at a base station. Rahnema discloses in a TDMA system (fig. 1), a method comprising dynamically selecting a fixed period rate for reverse channel signaling (fig. 3, items S11, S21, S31; col. 5, lines 13-17 and 22-32), receiving a voice or data burst belonging to a superframe comprising several bursts (fig. 3; col. 3, lines 51-53), determining that at least one burst in the superframe will collide with reverse channel signaling (fig. 2, step 31; col. 4, lines 18-20), buffering the received burst and transmitting the buffered burst after one frame (step 32; col. 4, lines 23-26). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to prevent burst collisions at a base station in the invention of Gilhousen in order to give priority to signaling messages (Rahnema, col. 1, lines 31-39).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gilhousen et al. (US 6,421,540) in view of Jang et al. (US 2003/0211847).

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gilhousen et al. (US 6,421,540) in view Rahnema (US 5,465,253) as applied to claim 5 above, and in further view of

Jang et al. (US 2003/0211847).

3. Regarding claims 4 and 9, Gilhousen and Rahnema each discloses a system having fixed rate signaling. However, neither Gilhousen nor Rahnema discloses retrieving the rate from memory. Jang discloses storing and retrieving a data rate value for reverse channel signaling (para. 42, lines 5-6; para. 55, lines 3-4). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to retrieve a data rate for a reverse signaling channel in the invention of Gilhousen or the invention of Gilhousen in view of Rahnema in order to properly decode transmitted signaling at a future time based on a various fixed rates (Jang, para. 49, lines 1-5).

Claims 11-13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corrigan et al. (US 5,818,825) in view of Rahnema (US 5,465,253).

4. Regarding claims 11 and 13, Corrigan discloses a method in a TDMA system (col. 2, lines 35-37), the method comprising selecting a fixed periodic rate for reverse channel signaling for a first channel (fig. 4A; fig. 4B, item 420; note: 2.5 ms per frame; col. 7, lines 10-25; note: a fixed number of bits for each slot within a 2.5 ms frame), and transmitting reverse channel signaling at the fixed periodic rate to a transmitting subscriber assigned to the first channel (col. 7, lines 19-20). The user is assigned to transmit on a first channel on an inbound path (fig. 4B).

5. However, Corrigan does not disclose reverse channel signaling being transmitted in a shared field associated with another call. Rahnema discloses in a TDMA system (fig. 1) transmitting reverse channel signaling in a shared signaling field (fig. 2, step 31; col. 4, lines 18-20), where the shared signaling field is associated with another call (fig. 3; col. 5, lines 23-30; note: the signaling is spread out over the different voice channels as needed). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to transmit reverse channel signaling in a

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shared signaling field in the invention of Corrigan in order to give priority to signaling messages (Rahnema, col. 1, lines 31-39).

6. Regarding claim 12, in Corrigan the system comprises an aligned slotting structure (fig. 8; col. 13, lines 5-10).

7. Regarding claim 16, in Corrigan the reverse channel signaling is transmitted in a shared signaling field (col. 7, lines 20-18-19; col. 5, lines 60-63).

Claims 11 and 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Vannucci (US 5,459,727).

8. Regarding claim 11, Vannucci discloses in a TDMA system (col. 4, lines 40-41 and 53-55), a method comprising selecting a fixed periodic rate for reverse channel signaling for a first channel (fig. 4, item 412; col. 7, lines 30-40 and 45-48) and transmitting reverse channel signaling at the fixed periodic rate to a transmitting subscriber assigned to the first channel (col. 7, lines 59-65; col. 10, lines 28-31 and 45-47).

9. However, Vannucci does not disclose reverse channel signaling being transmitted in a shared field associated with another call. Rahnema discloses in a TDMA system (fig. 1) transmitting reverse channel signaling in a shared signaling field (fig. 2, step 31; col. 4, lines 18-20), where the shared signaling field is associated with another call (fig. 3; col. 5, lines 23-30; note: the signaling is spread out over the different voice channels as needed). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to transmit reverse channel signaling in a shared signaling field in the invention of Vannucci in order to give priority to signaling messages (Rahnema, col. 1, lines 31-39).

10. Regarding claims 14-15, in Vannucci the system comprises an offset slotting structure (fig. 4, in the air) where the subscriber is assigned a first channel on an inbound path and receives


reverse channel signaling on a first channel on an outbound path (col. 7, line 56 through col. 8, line 11).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 571-272-3166. The examiner can normally be reached weekdays from 11:00 AM to 7:00 PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao, can be reached at 571-272-3174. The centralized fax number for the Patent Office is 571-273-8300. For non-official communications, the examiner's personal fax number is 571-273-3166 and the examiner's e-mail address is kevin.harper@uspto.gov.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications associated with a customer number is available through Private PAIR only. For more information about the PAIR system, see portal.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin C. Harper

November 28, 2005